

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) An internal line control system, wherein

a first telephone ~~having~~ supporting an Internet protocol (IP) and capable of being connected to the Internet through ~~[[the]]~~ a communication mode, comprising: a storage means for storing an IP address of a private branch exchange; and a sending means for sending a switching request to the IP address of the private branch exchange while specifying identification information of an internal line telephone of which switching is requested, accommodated in the private branch exchange; and

~~[[a]]~~ said private branch exchange ~~having~~ supporting an Internet protocol (IP) and connected to the Internet through the communication mode, comprising: ~~[[the]]~~ a storage means for storing a correlation between the IP address of the first telephone and an internal line number depending upon the identification information; and a transmitting means for transmitting, depending upon the correlation between the IP address and the internal line number, a control signal and a speech communication signal for ~~[[an]]~~ the internal line telephone

~~of the internal line number~~ to an address specified by the IP address.

2. (currently amended) An internal line control system, wherein

a first telephone ~~having~~ supporting an Internet protocol (IP) and capable of being connected to the Internet through ~~[[the]]~~ a communication mode, comprising: a storage means for storing an IP address of a private branch exchange; and a sending means for sending a switching request to the IP address of the private branch exchange while specifying identification information of an internal line telephone of which switching is requested, accommodated in the private branch exchange;

~~[[a]]~~ said private branch exchange ~~having~~ supporting an Internet protocol (IP) and connected to the Internet through the communication mode, comprising: ~~[[the]]~~ a storage means for storing a correlation between the IP address of the first telephone and an internal line number depending upon the identification information; and a transmitting means for transmitting, depending upon the correlation between the IP address and the internal line number, a control signal and a speech communication signal for ~~[[an]]~~ the internal line telephone ~~of the internal line number~~ to an address specified by the IP address; and

[[an]] said internal line telephone ~~corresponding to the internal line number~~ includes posting means for posting a message in that a control is switched over to the first telephone ~~having an Internet protocol (IP) and capable of being connected other Internet~~, and the private branch exchange posts the switching by the posting means of the internal line telephone at a time of switching to the first telephone ~~on the Internet~~.

3. (currently amended) An internal line control system, wherein

a first telephone ~~having~~ supporting an Internet protocol (IP) and capable of being connected to the Internet through [[the]] a communication mode, comprising: a storage means for storing an IP address of a private branch exchange; and a sending means for sending a switching request to the IP address of the private branch exchange while specifying identification information of an internal line telephone of which switching is requested, accommodated in the private branch exchange;

[[a]] said private branch exchange ~~having~~ supporting an Internet protocol (IP) and connected to the Internet through the communication mode, comprising: [[the]] a storage means for storing a correlation between the IP address of the first telephone and an internal line number depending upon the identification information; and a transmitting means for transmitting, depending upon the correlation between the IP

address and the internal line number, a control signal and a speech communication signal for ~~[[an]]~~ said internal line telephone ~~of the internal line number~~ to an address specified by the IP address; and

the private branch exchange further includes a receiving means for receiving authentication information transmitted with the switching request from the first telephone ~~connected to the Internet~~, and authenticating whether or not the switching request is acceptable depending upon the identification information.

4. (currently amended) An internal line control system, wherein

a first telephone ~~having~~ supporting an Internet protocol (IP) and capable of being connected to the Internet through ~~[[the]]~~ a communication mode, comprising: a storage means for storing an IP address of a private branch exchange; and a sending means for sending a switching request to the IP address of the private branch exchange while specifying identification information of an internal line telephone of which switching is requested, accommodated in the private branch exchange;

~~[[a]]~~ said private branch exchange ~~having~~ supporting an Internet protocol (IP) and connected to the Internet through the communication mode, comprising: ~~[[the]]~~ a storage means for storing a correlation between the IP address of the first telephone and an internal line number depending upon the

identification information; and a transmitting means for transmitting, depending upon the correlation between the IP address and the internal line number, a control signal and a speech communication signal for ~~[[an]]~~ the internal line telephone ~~of the internal line number~~ to an address specified by the IP address;

an encrypting means for encrypting a control signal and a speech communication signal exchanged between the private branch exchange and the first telephone; and

a decrypting means for decrypting the encrypted control signal and speech communication signal.

5. (currently amended) An internal line control system, wherein

a first telephone ~~having~~ supporting an Internet protocol (IP) and capable of being connected to the Internet through ~~[[the]]~~ a communication mode, comprising: a storage means for storing an IP address of a private branch exchange; and a sending means for sending a switching request to the IP address of the private branch exchange while specifying identification information of an internal line telephone of which switching is requested, accommodated in the private branch exchange; and

~~[[a]]~~ said private branch exchange ~~having~~ supporting an Internet protocol (IP) and connected to the Internet through the communication mode, comprising: ~~[[the]]~~ a storage means for

storing a correlation between the IP address of the first telephone and an internal line number depending upon the identification information; and a transmitting means for transmitting, depending upon the correlation between the IP address and the internal line number, a control signal and a speech communication signal for ~~[[an]]~~ the internal line telephone ~~of the internal line number~~ to an address specified by the IP address; and further comprising:

a plurality of the private branch exchanges accommodating at least one of the internal line telephone and ~~[[or]] the first telephones telephone on the Internet~~; wherein the first telephone ~~on the Internet~~ includes means for specifying identification information of the internal line telephone accommodated in the plurality of private branch exchanges, and requesting switching of the appropriate private branch exchange.

6. (currently amended) An internal line control system, wherein

a first telephone ~~having~~ supporting an Internet protocol (IP) and capable of being connected to the Internet through ~~[[the]]~~ a communication mode, comprising: a storage means for storing an IP address of a private branch exchange; and a sending means for sending a switching request to the IP address of the private branch exchange while specifying identification

information of an internal line telephone of which switching is requested, accommodated in the private branch exchange;

[[a]] said private branch exchange ~~having~~ supporting an Internet protocol (IP) and connected to the Internet through the communication mode, comprising: [[the]] a storage means for storing a correlation between the IP address of the first telephone and an internal line number depending upon the identification information; and a transmitting means for transmitting, depending upon the correlation between the IP address and the internal line number, a control signal and a speech communication signal for [[an]] the internal line telephone ~~of the internal line number~~ to an address specified by the IP address;

[[an]] said internal line telephone ~~corresponding to the internal line number~~ includes posting means for posting a message in that a control is switched over to the first telephone ~~on the Internet~~,

the private branch exchange posts the switching by the means for posting [[means]] of the internal line telephone at a time of switching to the first telephone ~~on the Internet~~; and a receiving means for receiving authentication information transmitted with the switching request from the first telephone ~~connected to the Internet~~, and authenticating whether or not the switching request is acceptable depending upon the identification information.

7. (currently amended) An internal line control system, wherein

a first telephone ~~having~~ supporting an Internet protocol (IP) and capable of being connected to the Internet through ~~[[the]]~~ a communication mode, comprising: a storage means for storing an IP address of a private branch exchange; and a sending means for sending a switching request to the IP address of the private branch exchange while specifying identification information of an internal line telephone of which switching is requested, accommodated in the private branch exchange;

[[a]] said private branch exchange ~~having~~ supporting an Internet protocol (IP) and connected to the Internet through the communication mode, comprising: ~~[[the]]~~ a storage means for storing a correlation between the IP address of the first telephone and an internal line number depending upon the identification information; and a transmitting means for transmitting, depending upon the correlation between the IP address and the internal line number, a control signal and a speech communication signal for ~~[[an]]~~ the internal line telephone ~~of the internal line number~~ to an address specified by the IP address;

[[an]] said internal line telephone ~~corresponding to the internal line number~~ includes posting means for posting a



message in that a control is switched over to the first telephone ~~on the Internet,~~

the private branch exchange posts the switching by the means for posting ~~[[means]]~~ of the internal line telephone at a time of switching to the first telephone ~~on the Internet;~~

an encrypting means for encrypting a control signal and a speech communication signal exchanged between the private branch exchange and the first telephone; and

a decrypting means for decrypting the encrypted control signal and speech communication signal.

8. (currently amended) An internal line control system, wherein a first telephone ~~having~~ supporting an Internet protocol (IP) and capable of being connected to the Internet through ~~[[the]]~~ a communication mode, ~~comprising~~ comprises:

a storage means for storing an IP address of a private branch exchange; and

a sending means for sending a switching request to the IP address of the private branch exchange while specifying identification information of an internal line telephone of which switching is requested, accommodated in the private branch exchange, and

~~[[a]]~~ said private branch exchange ~~having~~ supporting an Internet protocol (IP) and connected to the Internet through the communication mode, comprising:

[[the]] a storage means for storing a correlation between the IP address of the first telephone and an internal line number depending upon the identification information; and

a transmitting means for transmitting, depending upon the correlation between the IP address and the internal line number, a control signal and a speech communication signal for [[an]] the internal line telephone ~~of the internal line number~~ to an address specified by the IP address;

[[an]] said internal line telephone ~~corresponding to the internal line number~~ includes posting means for posting a message in that a control is switched over to the first telephone ~~on the Internet~~,

the private branch exchange posts the switching by the means for posting [[means]] of the internal line telephone at a time of switching to the first telephone ~~on the Internet~~;

the private branch exchange further includes a receiving means for receiving authentication information transmitted with the switching request from the first telephone ~~connected to the Internet~~, and authenticating whether or not the switching request is acceptable depending upon the identification information.

9. (currently amended) An internal line control system,  
wherein

a first telephone ~~having~~ supporting an Internet protocol (IP) and capable of being connected to the Internet through ~~[[the]]~~ a communication mode, comprising: a storage means for storing an IP address of a private branch exchange; and a sending means for sending a switching request to the IP address of the private branch exchange while specifying identification information of an internal line telephone of which switching is requested, accommodated in the private branch exchange;

[[a]] said private branch exchange ~~having~~ supporting an Internet protocol (IP) and connected to the Internet through the communication mode, comprising: ~~[[the]]~~ a storage means for storing a correlation between the IP address of the first telephone and an internal line number depending upon the identification information; and a transmitting means for transmitting, depending upon the correlation between the IP address and the internal line number, a control signal and a speech communication signal for ~~[[an]]~~ the internal line telephone ~~of the internal line number~~ to an address specified by the IP address;

[[an]] said internal line telephone ~~corresponding to the internal line number~~ includes posting means for posting a message in that a control is switched over to the first telephone ~~on the Internet~~,

the private branch exchange posts the switching by the means for posting ~~[[means]]~~ of the internal line telephone at a time of switching to the first telephone ~~on the Internet~~; a receiving means for receiving authentication information transmitted with the switching request from the first telephone ~~connected to the Internet~~, and authenticating whether or not the switching request is acceptable depending upon the identification information;

an encrypting means for encrypting a control signal and a speech communication signal exchanged between the private branch exchange and the first telephone; and

a decrypting means for decrypting the encrypted control signal and speech communication signal.

10. (currently amended) An internal line control system, wherein

a first telephone ~~having~~ supporting an Internet protocol (IP) and capable of being connected to the Internet through ~~[[the]]~~ a communication mode, comprising: a storage means for storing an IP address of a private branch exchange; and a sending means for sending a switching request to the IP address of the private branch exchange while specifying identification information of an internal line telephone of which switching is requested, accommodated in the private branch exchange;

[[a]] said private branch exchange ~~having~~ supporting an Internet protocol (IP) and connected to the Internet through the communication mode, comprising: [[the]] a storage means for storing a correlation between the IP address of the first telephone and an internal line number depending upon the identification information; and a transmitting means for transmitting, depending upon the correlation between the IP address and the internal line number, a control signal and a speech communication signal for [[an]] the internal line telephone ~~of the internal line number~~ to an address specified by the IP address;

[[an]] said internal line telephone ~~corresponding to the internal line number~~ includes posting means for posting a message in that a control is switched over to the first telephone ~~on the Internet~~,

the private branch exchange posts the switching by the means for posting [[means]] of the internal line telephone at a time of switching to the first telephone ~~on the Internet~~;

an encrypting means for encrypting a control signal and a speech communication signal exchanged between the private branch exchange and the first telephone; and

a decrypting means for decrypting the encrypted control signal and speech communication signal, ~~and further comprising~~

~~an encrypting means for encrypting a control signal and  
a speech communication signal exchanged between the private  
branch exchange and the telephone; and~~

~~a decrypting means for decrypting the encrypted control  
signal and speech communication signal.~~

11. (currently amended) An internal line control system, wherein

a first telephone having supporting an Internet protocol (IP) and capable of being connected to the Internet through ~~[[the]]~~ a communication mode, comprising: a storage means for storing an IP address of a private branch exchange; and a sending means for sending a switching request to the IP address of the private branch exchange while specifying identification information of an internal line telephone of which switching is requested, accommodated in the private branch exchange;

~~[[a]]~~ said private branch exchange having supporting an Internet protocol (IP) and connected to the Internet through the communication mode, comprising: ~~[[the]]~~ a storage means for storing a correlation between the IP address of the first telephone and an internal line number depending upon the identification information; and a transmitting means for transmitting, depending upon the correlation between the IP address and the internal line number, a control signal and a speech communication signal for ~~[[an]]~~ the internal line telephone

~~of the internal line number~~ to an address specified by the IP address;

a plurality of the private branch exchanges accommodating at least one of the internal line telephone and ~~[[or]] the first telephones telephone on the Internet~~; wherein the first telephone ~~on the Internet~~ includes means for specifying identification information of the internal line telephone accommodated in the plurality of private branch exchanges, and requesting switching of the appropriate private branch exchange;

~~the plurality of private branch exchanges accommodating the internal line telephone,~~ wherein IP addresses of the plurality of private branch exchanges are stored in a server on the Internet, and at least one of the first telephone ~~having an Internet protocol (IP) and capable of being connected to the Internet through the communication mode~~ ~~[[and/or]]~~ and the internal line telephone ~~obtain(s)~~ obtains from the server the IP address of the private branch exchange when requesting switching.

12. (currently amended) The internal line control system according to claim 1, wherein a computer having the function of transmitting/receiving sound is used as a substitute for the first telephone ~~on the Internet~~.

13. (currently amended) The internal line control system according to claim 1, wherein the private branch exchange accepting the switching request from the first telephone includes means for posting, when the internal line telephone is in use, a message to this effect to the first telephone requesting the switching.

14. (currently amended) The internal line control system according to claim 1, wherein an own IP address of the first telephone is stored in a server on the Internet instead of the first telephone, and the first telephone obtains the own IP address from the server when presenting the switching request.

15. (currently amended) The internal line control system according to claim 2, wherein a computer having the function of transmitting/receiving sound is used as a substitute for the first telephone ~~on the Internet~~.



AMENDMENTS TO THE DRAWINGS:

The attached sheets of drawings includes changes to Figures 1, 6, 7, 8, and 10. These sheets replace the original sheets including Figures 1, 6, 7, 8, and 10.

In Figure 1, Internet is used to describe element 40; in box 14, "line" is changed to "line telephone", and in box 12, "line" is changed to "line telephone".

In Figure 6, box 12, "line" is changed to "line telephone" and box 14, "line" is changed to "line telephone".

In Figure 7, box 12, "line" is changed to "line telephone" and box 14, "line" is changed to "line telephone".

In Figure 8, boxes 12a, 12b and 12n, "line" is changed to "line telephone" and element 16a is deleted from box 14, and in box 14, "line" is changed to "line telephone".

In Figure 10, boxes 14a, 14b and 14n, "line" is changed to "line telephone" and in box 14a element 16a is deleted. In Figures 10, boxes 12a, 12b and 12n, "line" is changed to "line telephone".